

REMARKS

Claims 29, 30, 34, and 35 have been cancelled. Claims 26 and 31 have been amended. Hence, Claims 26-28 and 31-33 are pending in the application. Reconsideration of the application in view of the remarks below is respectfully requested.

I. INTERVIEW SUMMARY

The Applicant thanks the Examiner for the Interview conducted on September 23, 2003. The Interview was between Examiner Good Johnson and the applicant's attorney, Christian A. Nicholes. Pending Claims 26 and 31 that were rejected in the Final Office Action were discussed along with Stam, "Aperiodic Texture Mapping," ERCIM, July 1996-March 1997, pages 1-9 ("Stam"). In particular, the discussion focused on the following: the rejections of Claims 26 and 31; the Applicant's proposed amendment to cancel Claims 29, 30, 34, and 35; and the Applicant's proposed amendment to add a limitation to Claims 26 and 31. The Applicant is providing herein the amendment that was proposed during the Interview.

II. SUMMARY OF THE REJECTIONS/OBJECTIONS

Claims 26-35 have been rejected under 35 U.S.C. § 102(b) as allegedly being anticipated by Stam. Claims 29, 30, 34, and 35 have been cancelled, obviating the rejections of those claims. Claims 26 and 31 have been amended to claim the invention more distinctly.

III. CLAIM REJECTIONS – 35 USC § 102

With respect to independent method Claim 26, there is recited a method for performing textured mapping of a target area, the method comprising:

providing a user interface that allows a user to select placement of aperiodic tiles on a texture image;

based on said placement, generating textured tiles; and
covering said target area in an aperiodic tiling pattern with said textured tiles;
wherein each of said aperiodic tiles has a periphery shape and wherein said aperiodic
tiling pattern is aperiodic relative to a pattern created by periphery shapes of said
aperiodic tiles as placed on said target area.

Support for the limitation “wherein each of said aperiodic tiles has a periphery shape and wherein said aperiodic tiling pattern is aperiodic relative to a pattern created by periphery shapes of said aperiodic tiles as placed on said target area” is found, for example, in Figure 4, on page 3 (“The pattern in which the tiles are applied is referred to herein as the tiling pattern. The peripheral shapes of the tiles dictate what type of tiling patterns are possible.”), and on page 12 (“An aperiodic tile set is a set of one or more tile shapes that exist in a given aperiodic tiling pattern.”) of the present application.

Stam does not teach or suggest an aperiodic tiling pattern that is **aperiodic relative to a pattern created by periphery shapes** of aperiodic tiles as placed on a target area. Instead, Stam discloses that a pattern may be generated by applying aperiodic **textures** on each tile in a set of tiles (Figure 1) that are placed on a surface. Without the aperiodic textures applied to the tiles, the shapes of the tiles themselves would not provide for the generation of an aperiodic pattern. Stam’s tiles are all the same shape: square. The placement of only square tiles on a surface does not by itself generate an aperiodic tiling pattern on that surface. Therefore, any aperiodicity achieved by Stam’s tiling pattern is due to the **textures** placed on the tiles, and **not** due to the **shapes** of the tiles in the set. As a result, any aperiodic tiling pattern disclosed in Stam is **not** aperiodic **relative to a pattern created by periphery shapes** of aperiodic tiles.

Furthermore, Stam does not teach or suggest providing a user interface that allows a user to select placement of aperiodic tiles on a texture image, and generating textured tiles based on the placement. Instead, Stam discloses that texture mapping techniques can be roughly classified into three groups. None of these groups teaches or suggests generating textured tiles based on user-selected placement of the tiles on a texture image.

In the first group, a texture is defined on a two-dimensional domain and mapped onto a surface. There is no teaching or suggestion that the mapping of the texture onto the surface is based in any way on a placement of the surface on a texture image, or that the surface is the surface of a tile of any kind. There is also no teaching or suggestion that the definition of the texture on the two-dimensional domain is based in any way on a placement of the domain on a texture image.

In the second group, a texture is a function defined for each point in space. There is no teaching or suggestion that the function is related in any way to a placement of a tile on a texture image.

In the third group, a texture is “grown” on a surface itself, for example by using a reaction diffusion process. There is no teaching or suggestion that growing a texture on a surface is related in any way to a placement of a tile on a texture image, or that the surface is the surface of a tile of any kind.

In fact, Stam discloses that its only focus is on the first group. As discussed above, the texture mapping techniques of the first group have nothing to do with a user-selected placement of aperiodic tiles on a texture image. Consequently, Stam does not teach or suggest providing a user interface that allows a user to select placement of aperiodic tiles on a texture image, and generating textured tiles based on the placement, as required by Claim 26.

Therefore, based on at least the reasons stated above, it is respectfully submitted that Claim 26 is allowable over the art of record and is in condition for allowance. It is further submitted that Claims 27 and 28, which depend from Claim 26 and therefore include the limitations of Claim 26, are allowable over the art of record for at least the reasons provided above relative to Claim 26. It is further submitted that Claims 31-33, which recite computer-readable medium counterparts to the methods recited in Claims 26-28, are allowable over the art of record for at least the reasons provided above relative to Claims 26-28.

One might be tempted in the future to reject the pending claims based on a combination of Stam with Glassner's Notebook, "Aperiodic Tiling," *IEEE Computer Graphics and Applications*, May/June 1998, pages 83-90 ("Glassner"). Glassner was cited in a previous Office Action. However, like Stam, Glassner fails to teach or suggest providing a user interface that allows a user to select placement of aperiodic tiles on a texture image, and generating textured tiles based on the placement. Therefore, even if Stam could be combined with Glassner, the combination would still fail to teach or suggest all of the limitations of Claims 26 and 31.

IV. CONCLUSION

For the reasons set forth above, it is respectfully submitted that all of the pending claims are now in condition for allowance. Therefore, the issuance of a formal Notice of Allowance is believed next in order, and that action is most earnestly solicited.

The Examiner is respectfully requested to contact the undersigned by telephone if it is believed that such contact would further the examination of the present application.

To the extent necessary, a petition for an extension of time under 37 C.F.R. § 1.136 is hereby made. Please charge any fee shortages or credit any overages Deposit Account No. 50-1302.

Respectfully submitted,
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